

Figure 2A
 AUS000 127051

The diagram illustrates a computer system architecture. At the top, the **Processor 252**, **Host/PCI Cache/Bridge 258**, **Main Memory 254**, and **Audio Adapter 266** are connected to a central **Bus 256**. The **Host/PCI Cache/Bridge 258** is also connected to the **Processor 252** and **Main Memory 254**. The **Bus 256** is a horizontal line with arrows pointing to the left and right, indicating bidirectional communication. Below the bus, several expansion cards are connected: **SCSI Host Bus Adapter 262**, **LAN Adapter 260**, **Expansion Bus Interface 264**, **Graphics Adapter 268**, and **Audio/Video Adapter 269**. The **SCSI Host Bus Adapter 262** is connected to a vertical bus that leads to **Disk 276**, **Tape 278**, **CD-ROM 280**, and **DVD 282**. The **Expansion Bus Interface 264** is connected to a horizontal bus that leads to **Keyboard and Mouse Adapter 270**, **Modem 272**, and **Memory 274**. The **LAN Adapter 260** is connected to a vertical bus that leads to **Keyboard and Mouse Adapter 270**, **Modem 272**, and **Memory 274**. The **Graphics Adapter 268** is connected to a vertical bus that leads to **Keyboard and Mouse Adapter 270**, **Modem 272**, and **Memory 274**. The **Audio/Video Adapter 269** is connected to a vertical bus that leads to **Keyboard and Mouse Adapter 270**, **Modem 272**, and **Memory 274**. The number **250** is located at the bottom center of the diagram.

Figure 2B
AUS000127051

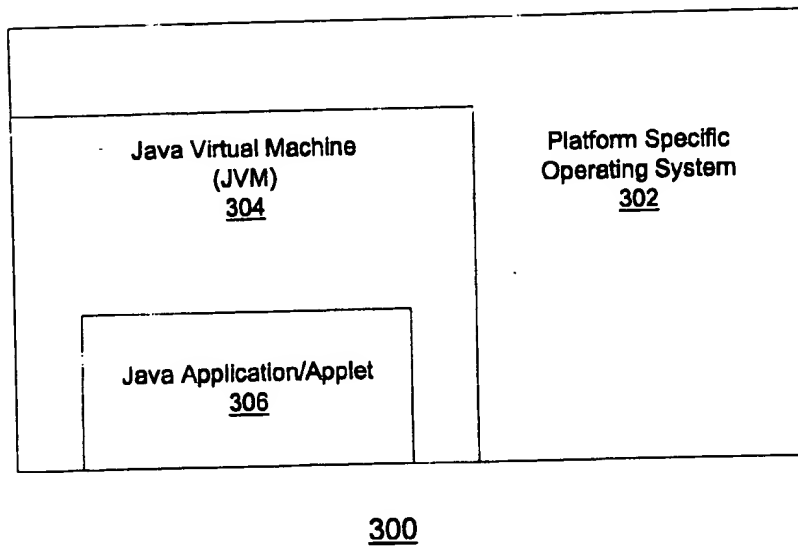


Figure 3A
 AUS000127US1

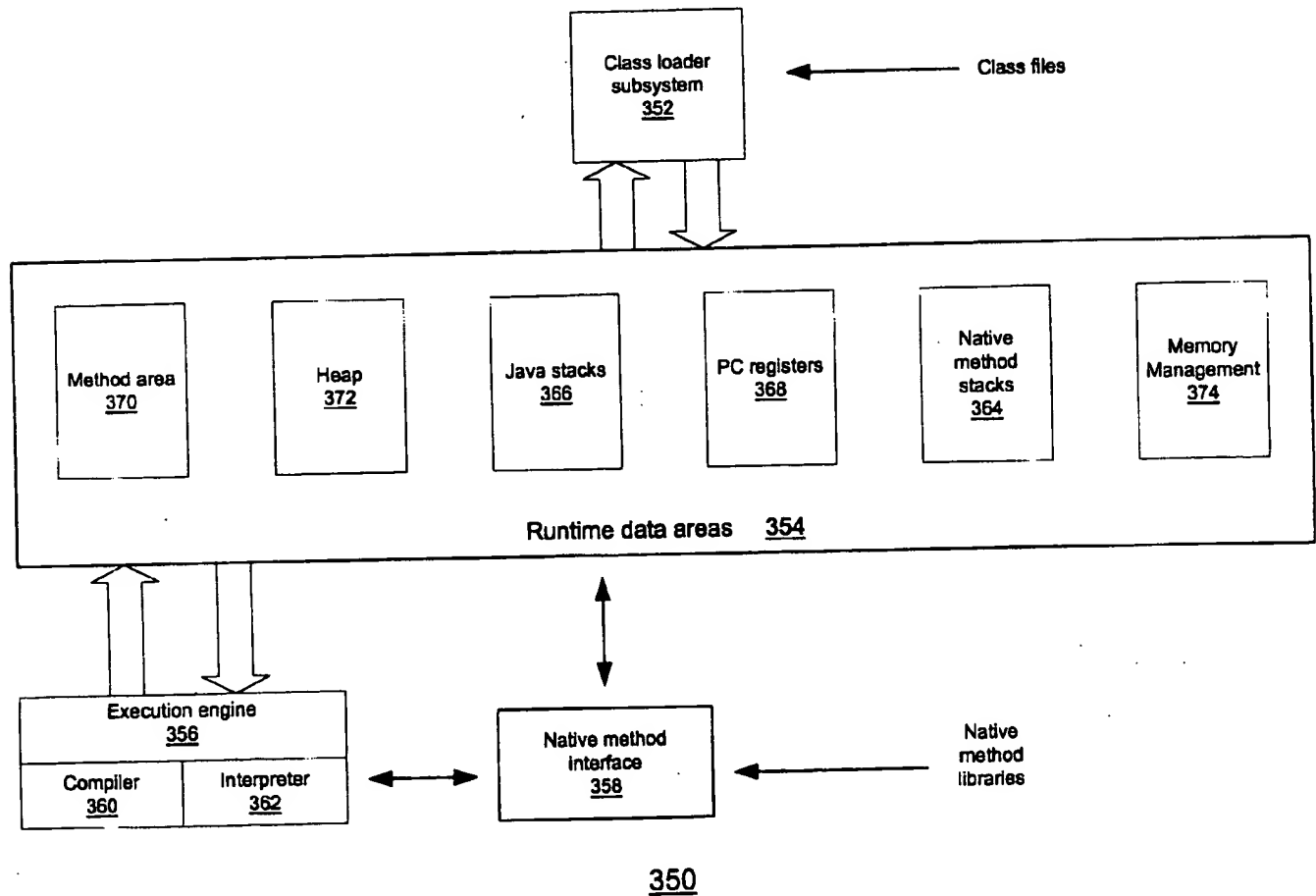
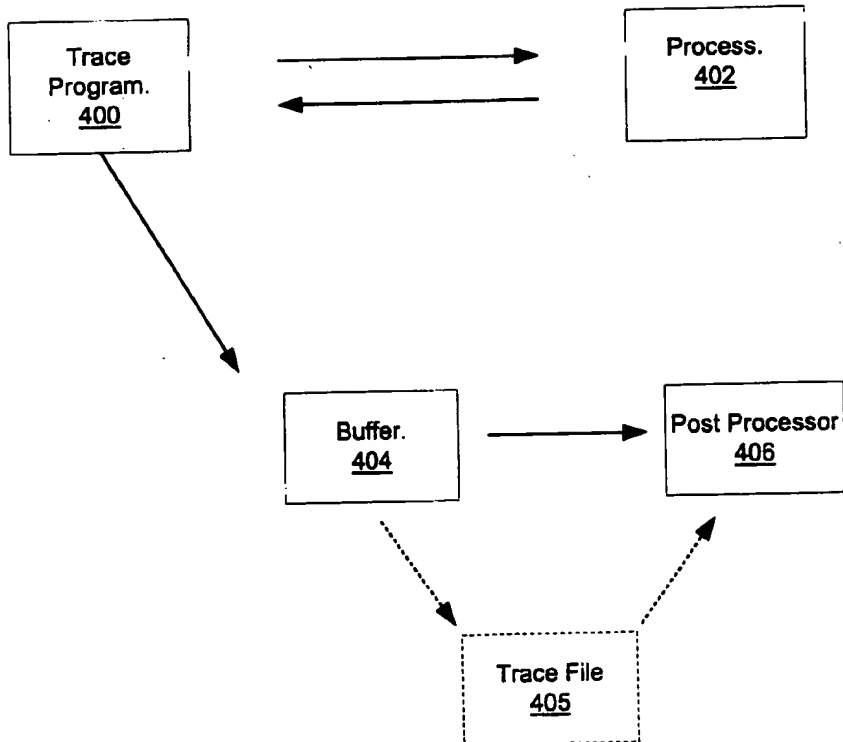


Figure 3B
 AUS000127US1

000127US1-016TET960

Figure 4

AUS000127US 1



000120" 06TET960

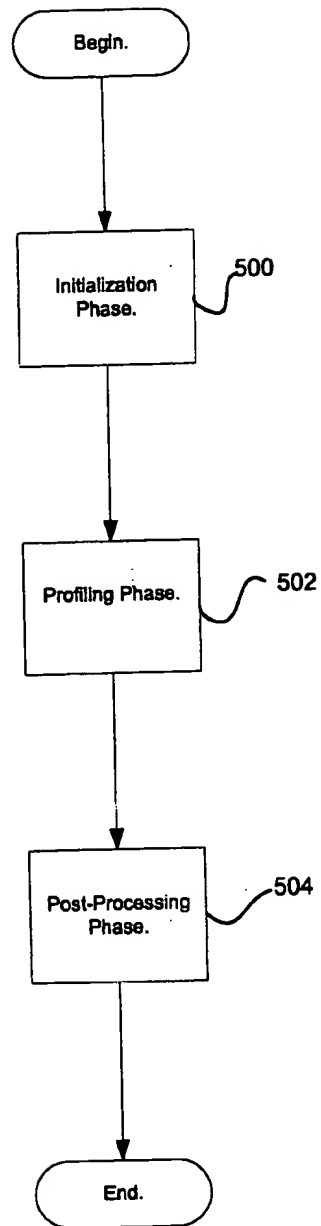
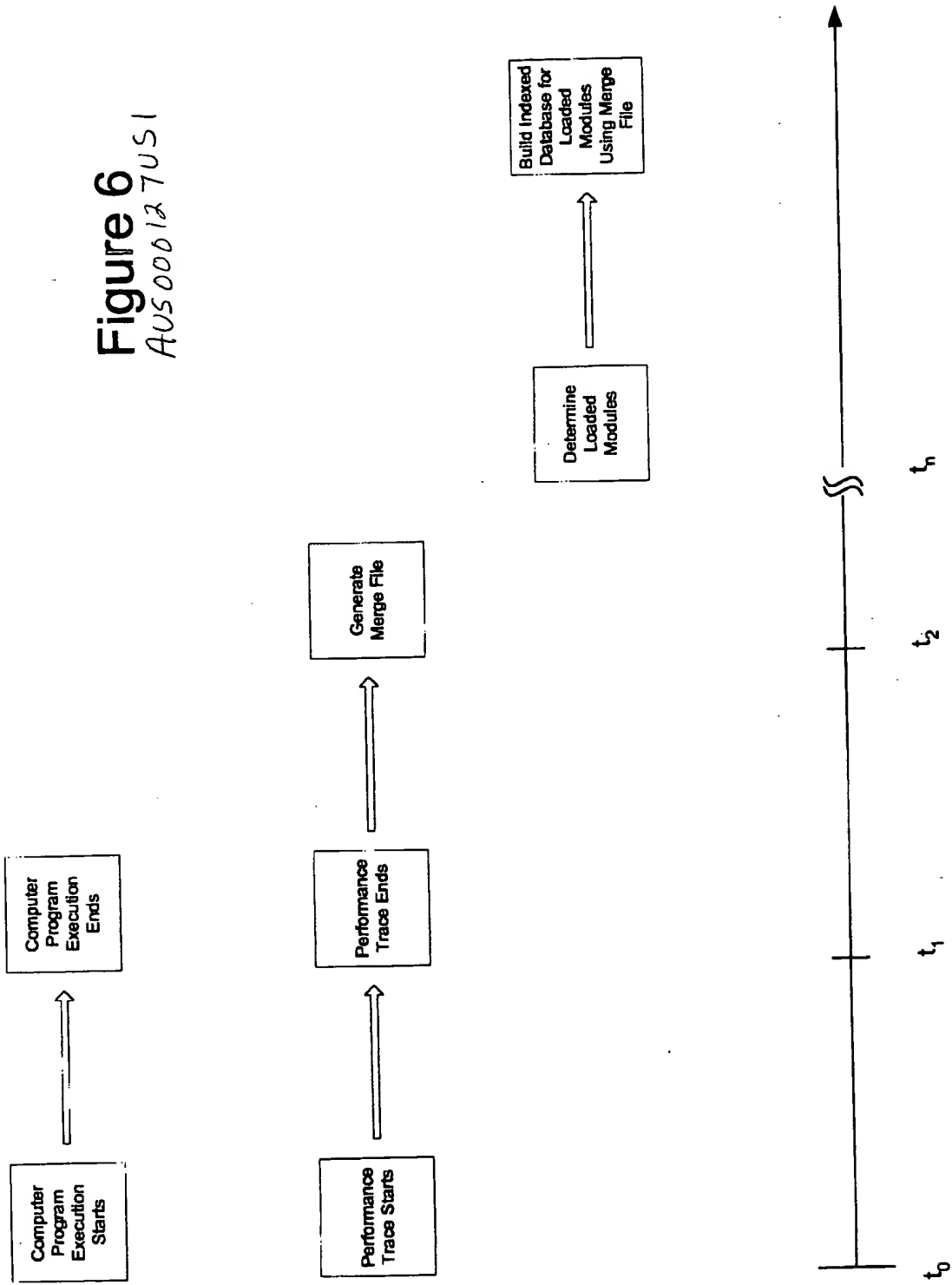


Figure 5
AVS000127US1



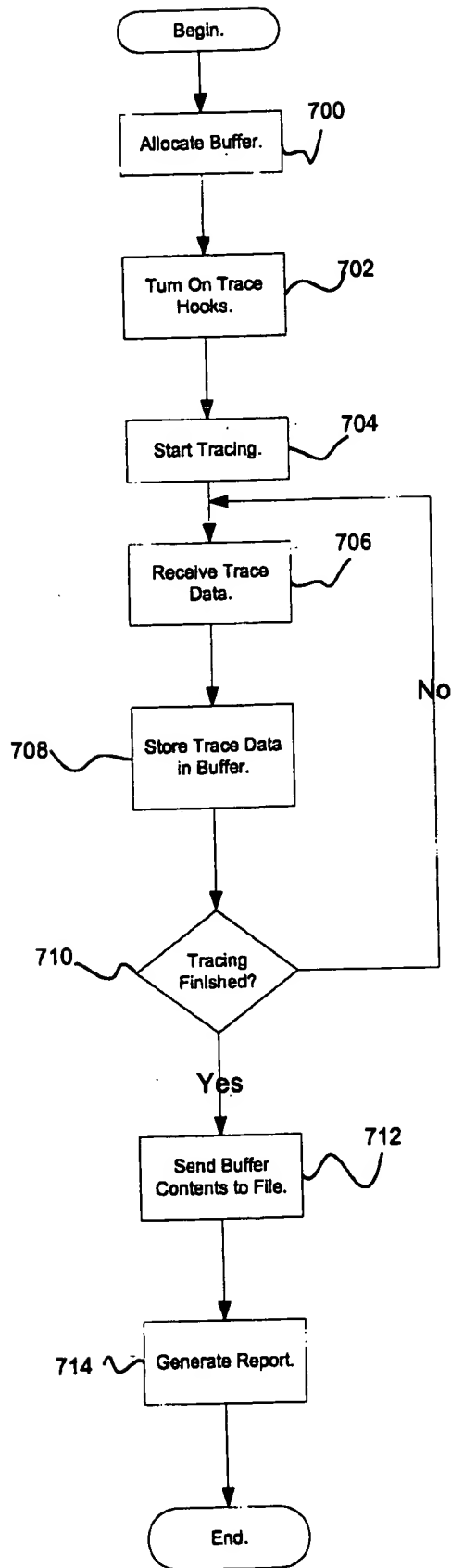


Figure 7
AVS000127051

SECRET

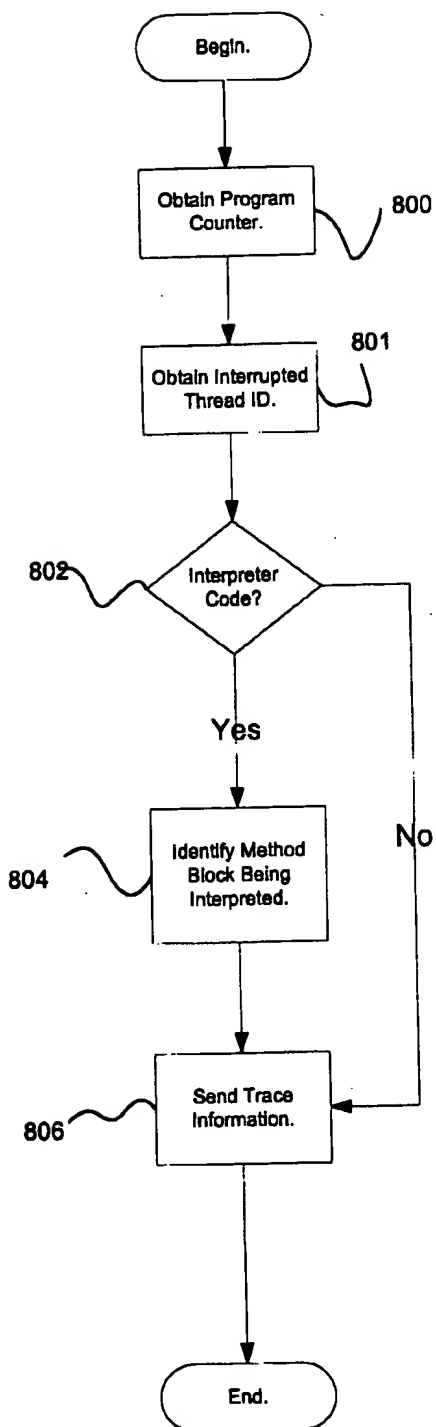


Figure 8
AUS 000 127051

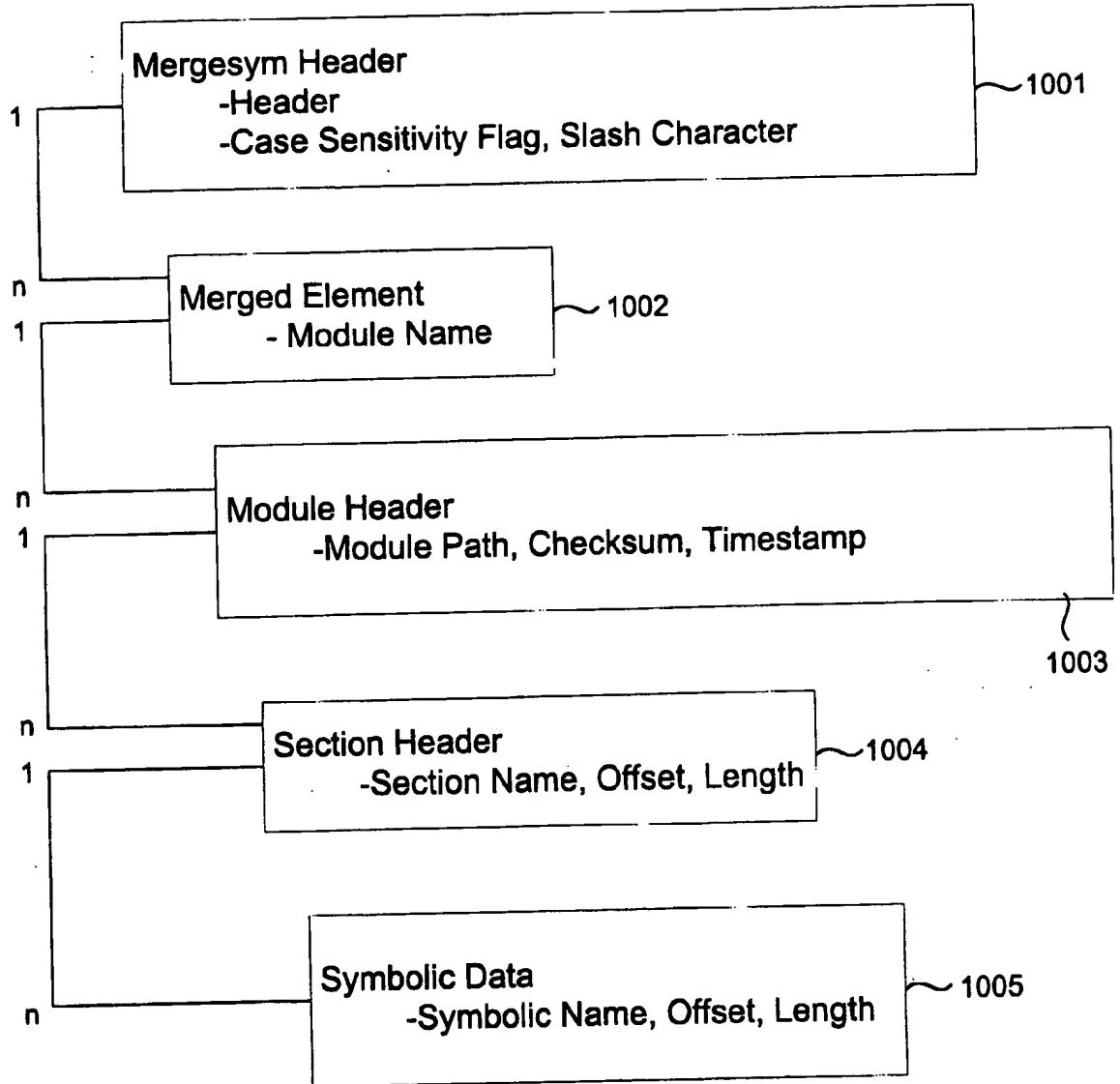


Figure 10A
AUS 000 127051

1000

Representation of a Sample Merge File:

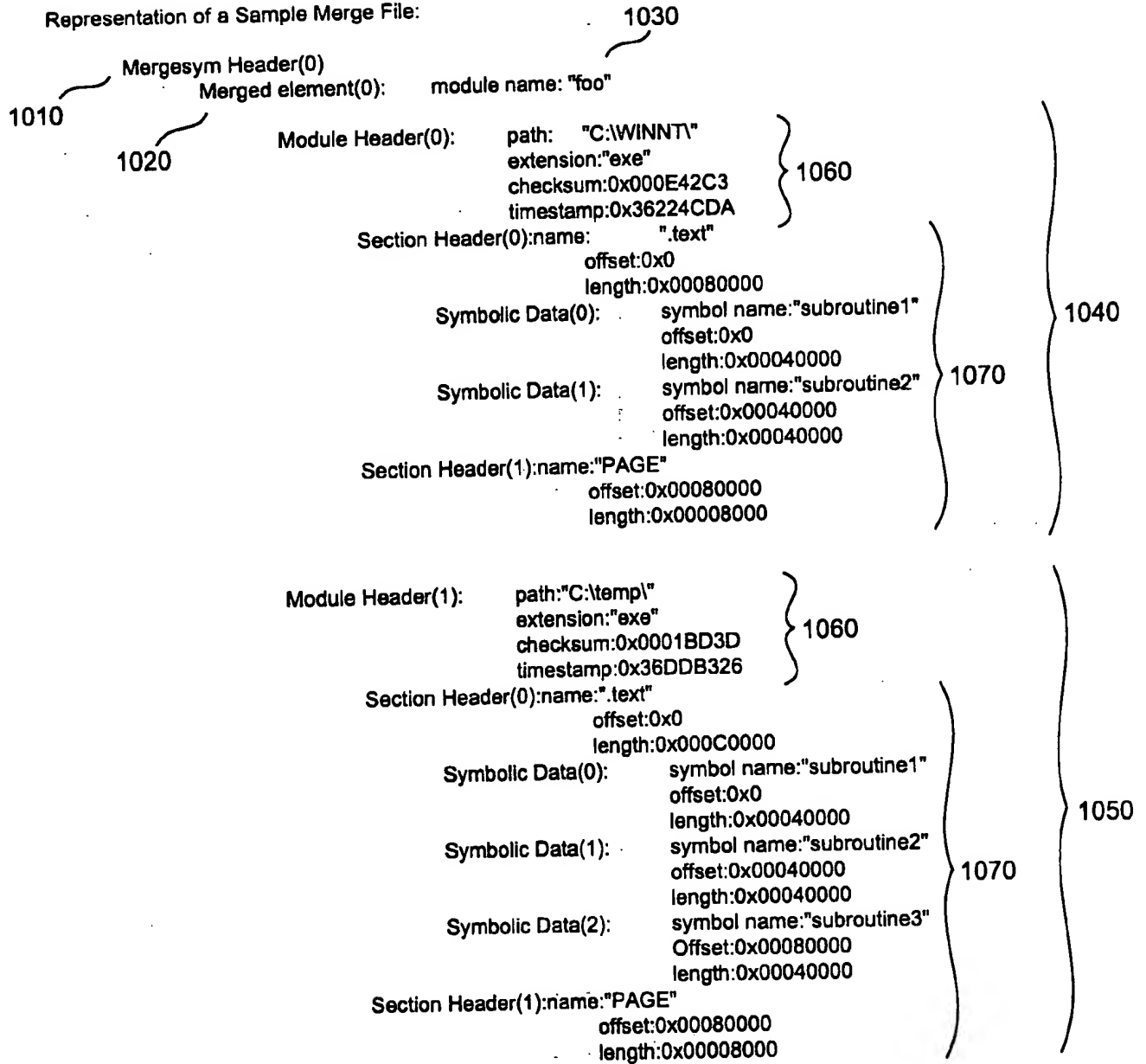


Figure 10B
AUS000127US 1

000F20"05TF960

1100

Sample Trace file:

```
A8 1 4:33900363 0 00000054
19 38 4:33904248 0 00000002 80140000 00080000 68000020 000E42C3 36224CDA .text C:\WINNT\foo.exe
19 38 4:339045d4 0 00000002 801C0000 00008000 60000020 000E42C3 36224CDA PAGE C:\WINNT\foo.exe
11 B4 4:339007D7 0 3E8
11 B3 4:3390191E 0 00000000 00000000
19 38 4:33b280E7 0 00000002 80240000 000C0000 68000020 0001BD3D 36DDB326 .text C:\temp\foo.exe
19 38 4:33904473 0 00000002 80300000 0000C000 60000020 0001BD3D 36DDB326 PAGE C:\temp\foo.exe
10 03 4:33C35EC5 0 80249000 00000002 00000005 00000000 00000000 00000000 00000000 00000000
19 39 4:33E04248 0 00000002 80140000
19 44 4:55A04368 0 00001F9A 445AF040 00000074 java/lang/String.<init>([[C)V
19 44 4:55A04368 0 00001F9A 445AF0D8 0000007E java/lang/System.arraycopy ((Ljava/lang/Object;Ljava/lang/Object;I
```

Figure 11
AUS000127051

1200

Sample MTE file:

```
19 38 4:33904248 0 00000002 80140000 00080000 68000020 000E42C3 36224CDA .text C:\WINNT\foo.exe
19 38 4:339045d4 0 00000002 801C0000 00008000 60000020 000E42C3 36224CDA PAGE C:\WINNT\foo.exe
19 38 4:33b280E7 0 00000002 80240000 000C0000 68000020 0001BD3D 36DDB326 .text C:\temp\foo.exe
19 38 4:33904473 0 00000002 80300000 0000C000 60000020 0001BD3D 36DDB326 PAGE C:\temp\foo.exe
19 39 4:33E04248 0 00000002 80140000
19 44 4:55A04368 0 00001F9A 445AF040 00000074 java/lang/String.<init>([[C)V
19 44 4:55A04368 0 00001F9A 445AF0D8 0000007E java/lang/System.arraycopy ((Ljava/lang/Object;Ljava/lang/Object;I
```

Figure 12
AUS000127051

1300

Sample Database:

Address lookup by (pid:address) gives:

```

1310 ~
2:80140000 - C:\WINNT\foo.exe(subroutine1)
2:80180000 - C:\WINNT\foo.exe(subroutine2)
2:80240000 - C:\temp\foo.exe(subroutine1) ~ 1320
2:80280000 - C:\temp\foo.exe(subroutine2)
2:802C0000 - C:\temp\foo.exe(subroutine3)

```

Figure 13A
AUS000127US1

Figure 13B
AUS0001270S1

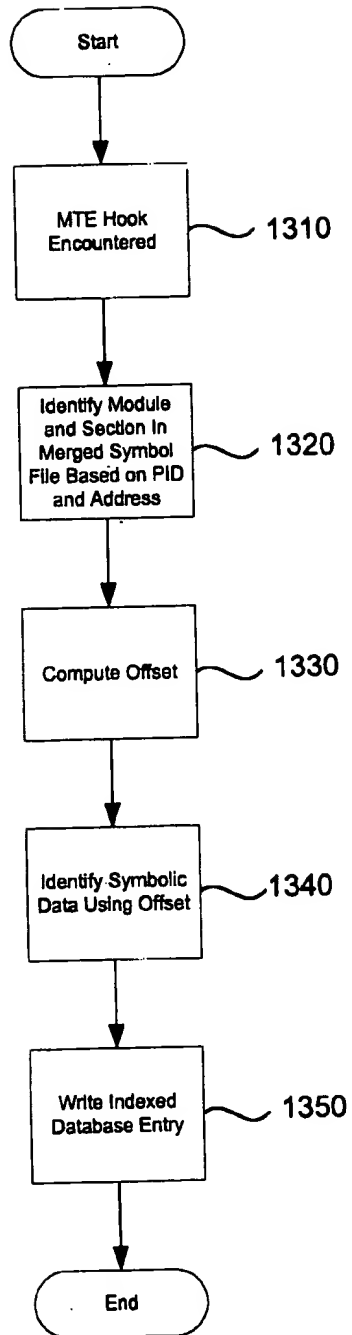


Figure 14
AUS000127US1

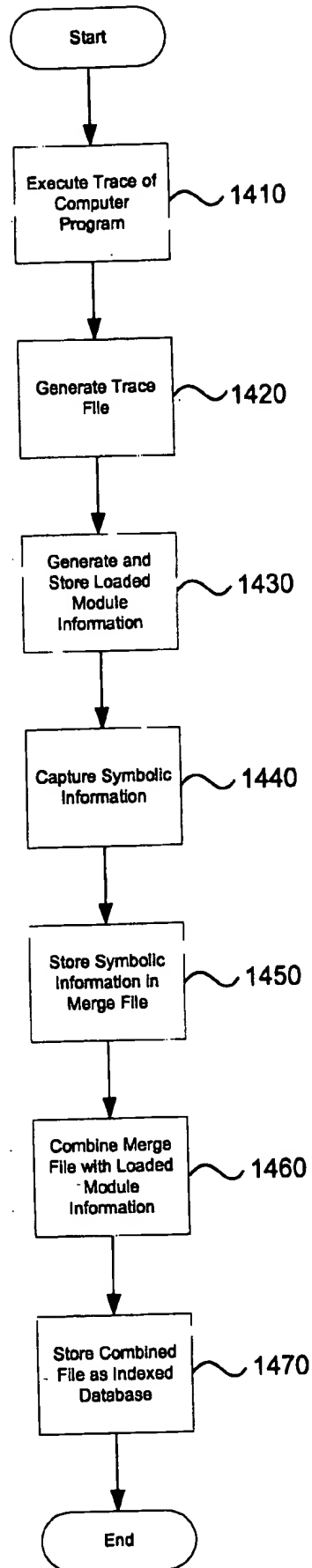


Figure 15
AUS000127US1

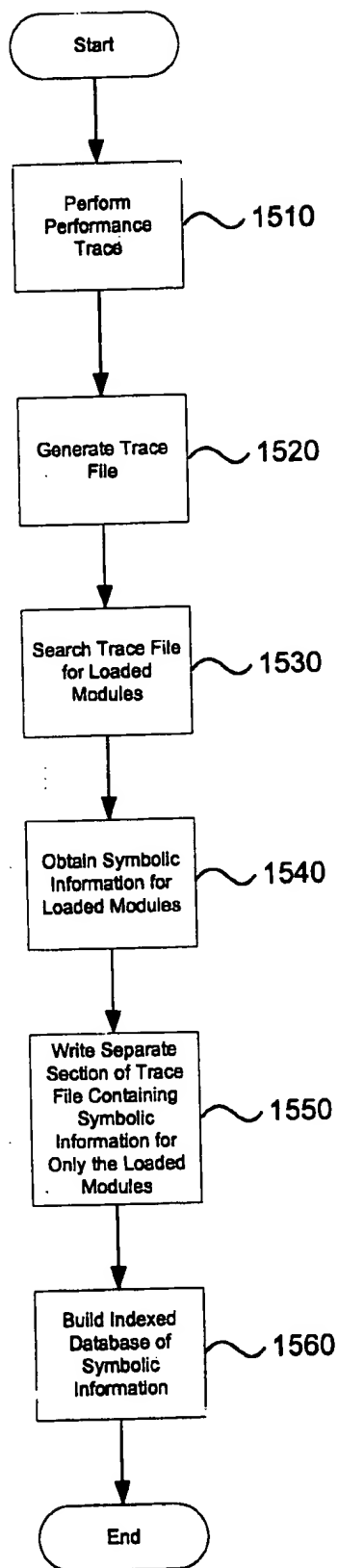


Figure 16

AUS 000127051

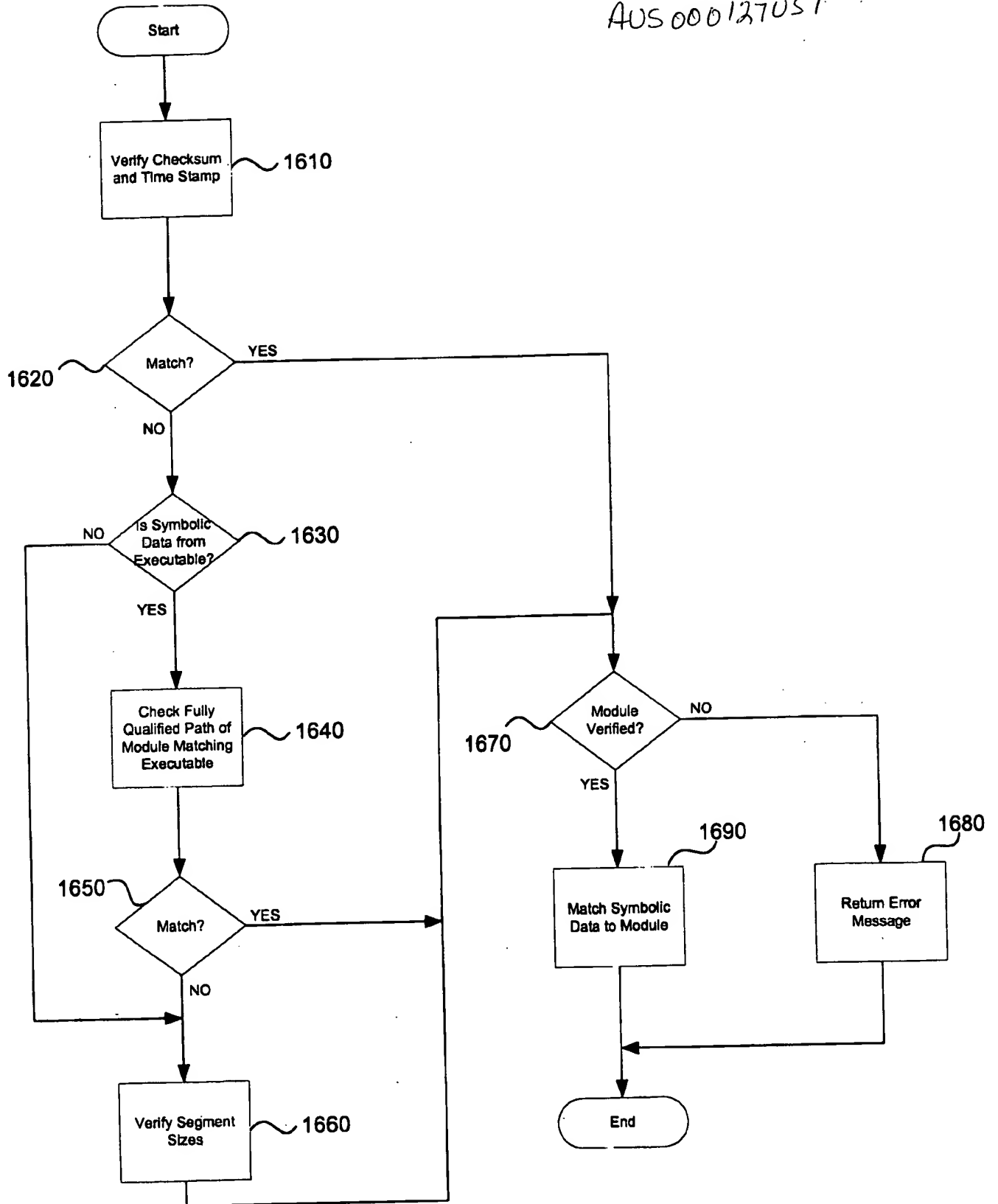
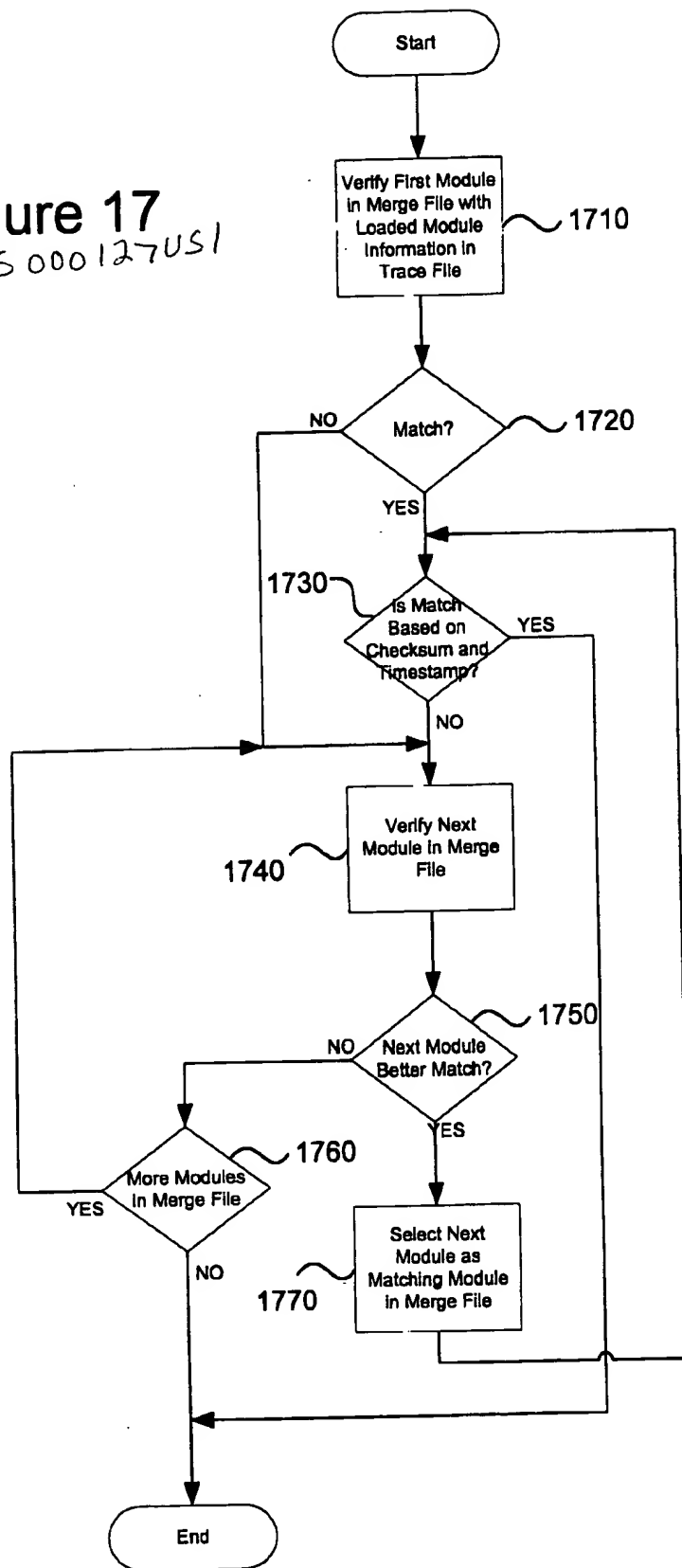


Figure 17
AUS 000127US1



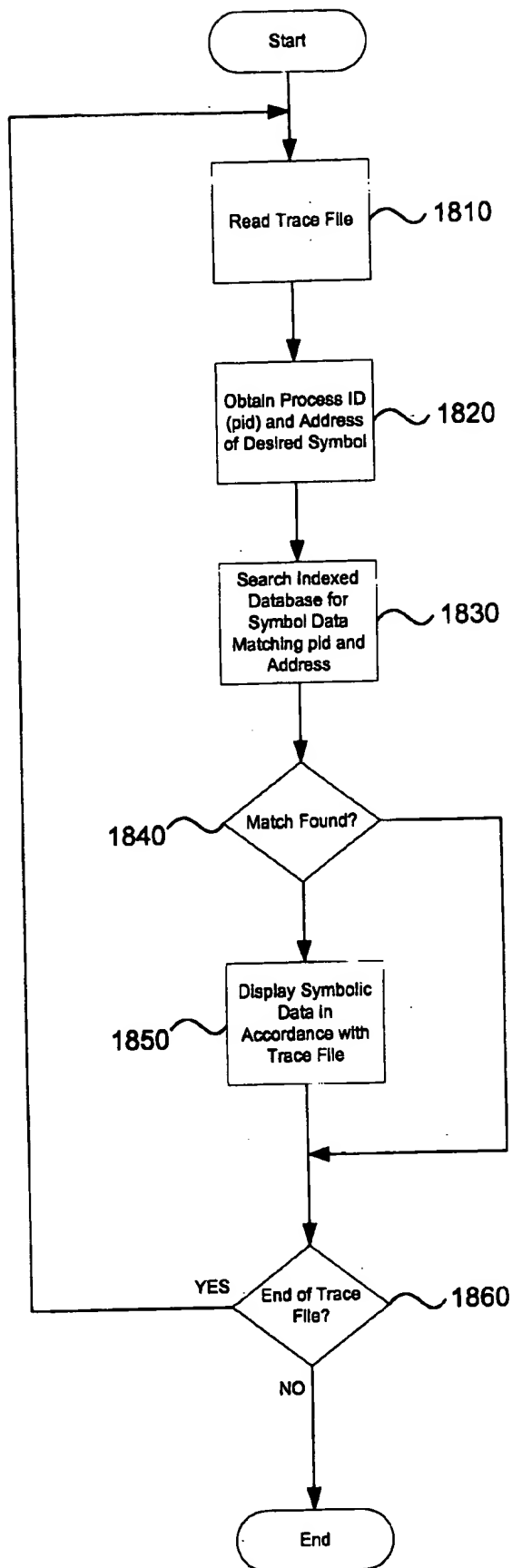


Figure 18
AUS000127US1

FileName \\winnt\system32\hal.dll

TaskName system

pid 0

start 80016180

size 00001e00

SegName PAGE SegNo 0x3

Symbols a

80016180	6604	Start_Segment_#3
80016604	113e	HalGetAdapter
80017742	1c	IoAssignDriveLetters
8001775e	1c	IoReadPartitionTable
8001777a	1c	IoSetPartitionInformation
80017796	f0	IoWritePartitionTable
80017886	34	HalAdjustResourceList
800178ba	44	HalAssignSlotResources
800178fe	682	HalGetInterruptVector
80017f80	0	End_Segment_#3

Figure 19

AUS000127US1

FileName d:\winnt\system32\hal.dll

TaskName system

pid ????

start 0

size 00001e00

SegName PAGE SegNo 0x3

Symbols a

0	6604	Start_Segment_#3
474	113e	HalGetAdapter
15b2	1c	IoAssignDriveLetters
15ce	1c	IoReadPartitionTable
15ea	1c	IoSetPartitionInformation
1605	f0	IoWritePartitionTable
16f5	34	HalAdjustResourceList
1739	44	HalAssignSlotResources
1dbb	682	HalGetInterruptVector
253d	0	End_Segment_#3

Figure 20

AUS000127US1

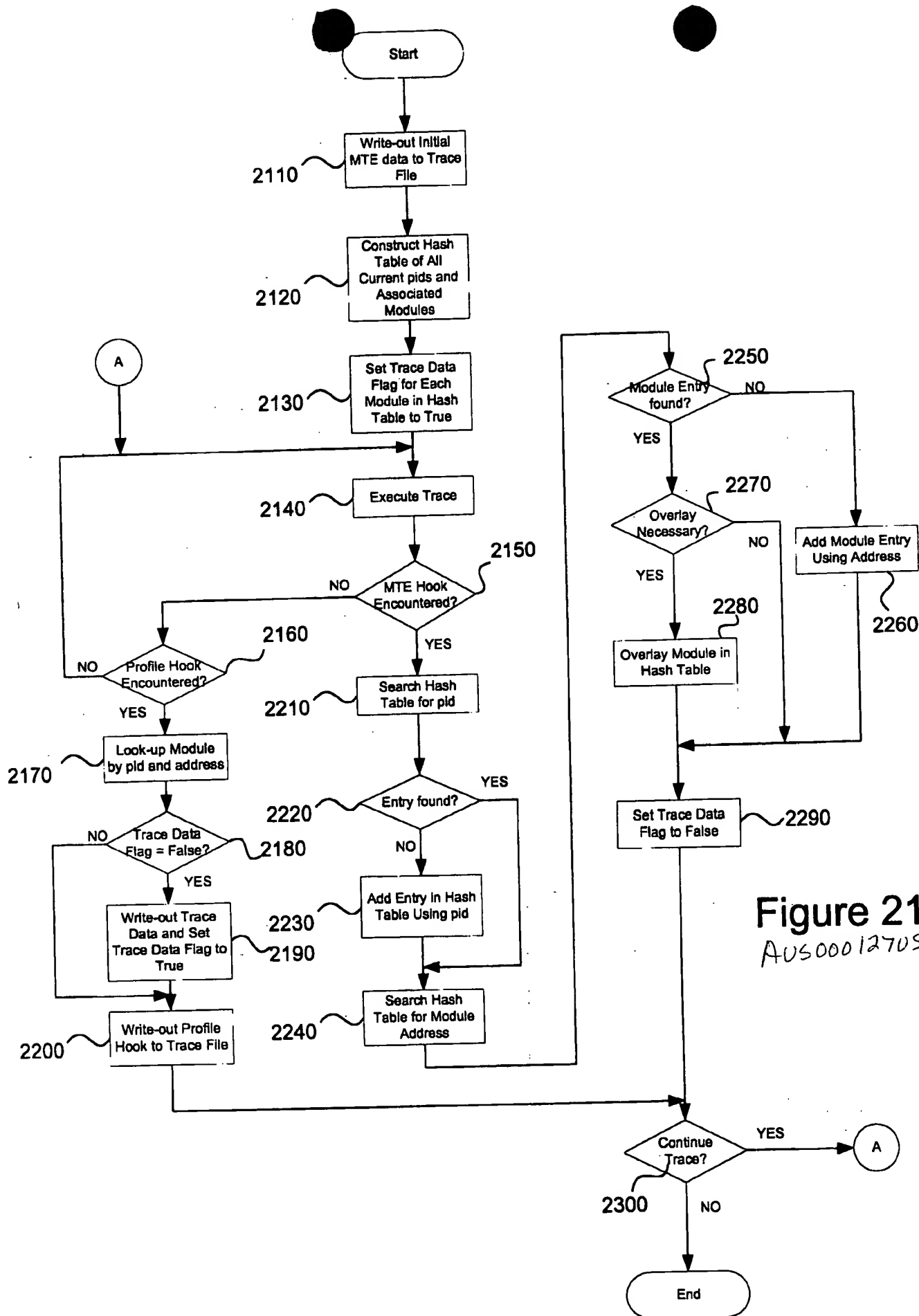


Figure 21
AUS000127051